

2005-2007 IT PLAN Summary - Agency Budget Request

00112 INFORMATION TECHNOLOGY

2005B0100112

AGENCY IT PLAN CONTACT DATA

ITD's IT plan and budget are defined by Mike Ressler, Dan Sipes, and Rob Gall.

Rob Gall 328-1990 rgall@state.nd.us
Dan Sipes 328-4317 dsipes@state.nd.us
Mike Ressler 328-1001 mressler@state.nd.us

AGENCY IT OVERVIEW

The Information Technology Department's mission statement is:

"To provide leadership and knowledge to assist our customers in achieving their mission though the innovative use of information technology."

Business drivers represent or categorize the major services provided within an organization. In essence, the business drivers further define an organization's mission statement and commonly consist of 4 to 8 statements. Put another way, the business driver's for a state agency collectively communicate the reason why that agency was formed and its strategic direction.

ITD has established the following four business drivers:

- Provide value to our customers: Continually improve the quality & timeliness of ITD's products & services while maintaining competitive rates.
- Statewide direction and leadership: Provide strategic IT direction for government and education in ND and influence the deployment of IT throughout the state.
- Customer relationships and satisfaction: Understand customer business requirements and raise awareness of technologies available in order to provide products and services that will meet or exceed their expectations and assist in accomplishing their goals.
- Learning and Growth: Achieve an efficient, motivated, and educated workforce with the knowledge, skills, and ability to meet our current and future challenges.

Division Roles and Activities

The following sections identify and explain the roles of each ITD division in supporting the department's objectives.

The **IT Planning Division** has responsibility for technology planning and oversight duties assigned to ITD in NDCC 54.59 including reviewing and approving technology plans, establishing standards and guidelines, preparing the statewide technology plan, and approving technology acquisitions. The division also acts as staff to the Legislative Council Information Technology Committee and the CIO by providing oversight of large projects and coordinating statewide initiatives. The division carries out these responsibilities by promoting best practices for the management of technology and encouraging the involvement and cooperation of state agencies. The division prepares and monitors the department's business plan and assists with the implementation of best practices within ITD.

Areas of emphasis for the IT Planning Division include; establishing the enterprise architecture process, furthering the use of formalized project management best practices, establishing the

2005-2007 IT PLAN Summary - Agency Budget Request

process to coordinate, direct and communicate technology related research, provide statewide coordination of agency IT planning and produce the statewide IT plan, and provide consulting services to agencies as needed.

The **Software Development Services Division** develops and maintains computerized applications and provides related consulting services. Its responsibilities include design, development, and support of customized software applications that operate on a variety of computer platforms and database management systems. The staff is on-call to support production applications 24 hours per day. Emphasis on the Web is changing the manner in which state government provides services to the public, the division is proactive in leading North Dakota state government in this technology and others where it is feasible and cost effective.

Areas of emphasis for the Software Development Division include; expand project management knowledge and techniques, improve operational work processes, improve web service offerings, and attain a staffing level with the knowledge, skills and abilities to meet customer demand.

The **Computer Services Division** is responsible for central computer systems and their operations. The staff in this division oversee all architecture and system hardware to serve applications and world-wide-web based systems to state government. The technical services staff oversee the operating environments for S/390, AS/400, Sun servers and the enterprise print systems. Disk and tape storage are managed with Tivoli Storage Manager for the storage area network and S/390. The server support staff oversee the Intel platforms running Linux and Windows operating systems and also support the enterprise anti-virus systems. Supported databases include Oracle, DB/2 and ADABAS and are all internet-accessible providing data to state government users and internet web users. The groupware section supports enterprise versions of Microsoft Exchange, Lotus Notes and SMTP mail servers. These systems are host for nearly ten-thousand e-mail accounts. The operations staff provide round-the-clock job processing and routine system procedures required during the non-business hours. This section also assists with the routine operations of ITD including mail distribution and physical management of the central computer room. The computer room is environmentally controlled and electrically protected by an uninterrupted power supply. All sections employ an on-call routine to provide twenty-four hour support for system availability.

Areas of emphasis for the Computer Services Division include; maintain and improve upon the services required to support a 24 x7 operation, actively participate in the emerging enterprise architecture process, and investigate, recommend, and implement technologies that improve upon the state's technology infrastructure.

The **Telecommunication Services Division** maintains telephone systems and services, video services, network infrastructure, and help desk support. The division designs and maintains the state's wide area network for all government and education entities in the state. The voice, data and video systems and services the Telecommunications division provides are mission critical to government and education in North Dakota. The division strives to make these systems and services reliable and effective for the people who rely on them.

Areas of emphasis for the Telecommunications division include; provide systems and network to support 10,000 telephones, 5,000 voice mailboxes, and 10 million minutes per year of long distance; provide systems and network support to over 20,000 computer connections at over 450 locations; providing support center assistance for over 5,000 calls; enhancing capacity for internet access; furthering DSL service as a lower cost connectivity alternative to T-1; and, pursue the use of Voice over IP and Wireless within state government.

The **Administrative Services Division** handles agency personnel and accounting support, network and host security, research and development, records management, micrographics, and contingency planning. Internal accounting, secretarial services, rate schedules and billings are provided by this division. Staff in this division provide security administration for ITD hosts and firewall security for the state backbone. Disaster recovery plans are developed and tested. Staff in this division establish and administer statewide records and forms management programs to assist state agencies in the creation, utilization, maintenance, retention, and final disp

2005-2007 IT PLAN Summary - Agency Budget Request

AGENCY TECHNOLOGY GOALS AND OBJECTIVES

ITD's strategic planning process ensures our ability to meet the future service demands of our customers and improve the efficiency and effectiveness of our organization. Outcomes from the process include a three year strategic plan and an annual operations plan. The strategic plan establishes our vision, goals and objectives. The operations plan identifies the specific activities that will help us to achieve our goals.

The framework for ITD's strategic business plan is outlined by four goals, they are;

- 1) Define and pursue opportunities for creating, expanding, or eliminating services to maximize the value of ITD to government and education.
- 2) Manage our resources to improve efficiency and reduce cost.
- 3) Provide an employee work environment that invites challenge, inspires innovation, fosters pride, and encourages professional growth.
- 4) Maintain an IT infrastructure that meets or exceeds the service level expectations as defined by ITD and our customers.

Because ITD's business is providing information technology services, the distinction between business goals and IT goals is more difficult to ascertain. Goals 1, 2, and 3 lean towards the operational aspects of ITD's business. Goal 4 is directed towards IT infrastructure improvements that are essential to "keeping the lights on".

The department's performance management program defines organizational and IT performance objectives. The program's structure is best represented by a cascading analogy where measures are developed at multiple layers with the upper layer having the fewest "macro" measures. Each sub-layer down becomes more "micro" while supporting the layer above it.

ITD's upper layer of performance objectives are; 1) Acceptable level of total net assets, 2) Percentage of ITD rates reported in Annual Report that are competitive, 3) Total number of customer projects and work requests completed, 4) Customer satisfaction indexes, 5) Employee satisfaction indexes, 6) Controllable employee turnover, 7) Percentage of service levels met, 8) Percentage of strategic business plan objectives completed or on schedule.

The lowest layer of performance objectives is known as "Service Level Objectives". This layer establishes customer expectations for each service and measures the performance of technical components critical to providing the service. It is this layer of performance objectives that could be described as ITD's IT objectives.

Number of Desktop Computers	247	Windows 98	0
Number of Desktop Computers planned to be replaced	124	Wndows NT	0
Aveage cost of Desktop Computer Replacements	880	Windows 2000	90
Number of Laptop Computers	53	Windows XP	10
Number of Laptop Computers Planned to be replaced	27	Other	0
Aveage cost of Laptop Computer Replacements	2000		

Number of PC's by Region							
1	2	3	4	5	6	7	8
0	0	0	0	0	0	300	0

Agency Technology Activities

A listing of technology activities is provided in ITD's Performance Management Matrix.

IT Capture Infrastructure Budget Details - Agency Budget Request

Page 4 of 68

00112 INFORMATION TECHNOLOGY

Date: 11/29/2004

2005B0100112

Time: 3:56:02PM

		Current Appropriation	Budget Request	Optional Adjustments	Request Plus Optionals	Subsequent Biennium
10	SALARIES AND WAGES					
	SALARIES, WAGES & BENEFITS	\$25,715,694	\$26,348,724	\$0	\$26,348,724	\$26,539,134
	Total	\$25,715,694	\$26,348,724	\$0	\$26,348,724	\$26,539,134
30	OPERATING EXPENSES					
IT3002	IT-DATA PROCESSING	\$84,258	\$126,245	\$0	\$126,245	\$127,000
IT3003	IT TELEPHONE	\$6,768,006	\$7,064,581	\$0	\$7,064,581	\$7,000,000
IT3005	IT SOFTWARE/SUPPLIES	\$8,192,983	\$9,980,735	\$0	\$9,980,735	\$10,012,000
IT3008	IT CONTRACTUAL SVCS & REPAIRS	\$12,226,410	\$13,640,084	\$0	\$13,640,084	\$13,650,000
IT3038	IT EQUIPMENT UNDER \$5000	\$847,000	\$1,226,000	\$0	\$1,226,000	\$1,213,000
	Total	\$28,118,657	\$32,037,645	\$0	\$32,037,645	\$32,002,000
50	CAPITAL ASSETS					
TI5016	IT EQUIPMENT \$5000 & OVER	\$5,323,000	\$0	\$4,969,000	\$4,969,000	\$5,000,000
	Total	\$5,323,000	\$0	\$4,969,000	\$4,969,000	\$5,000,000
70	DIVISION OF INDEPENDENT STUDY					
	SALARIES, WAGES & BENEFITS	\$106,058	\$111,802	\$0	\$111,802	\$111,802
IT3002	IT-DATA PROCESSING	\$1,000	\$12,582	\$0	\$12,582	\$12,582
IT3003	IT TELEPHONE	\$66,278	\$55,396	\$0	\$55,396	\$55,396
IT3005	IT SOFTWARE/SUPPLIES	\$10,000	\$10,000	\$0	\$10,000	\$10,000
IT3008	IT CONTRACTUAL SVCS & REPAIRS	\$5,007	\$5,000	\$0	\$5,000	\$5,000
IT3038	IT EQUIPMENT UNDER \$5000	\$109,955	\$110,000	\$0	\$110,000	\$110,000
TI5016	IT EQUIPMENT \$5000 & OVER	\$15,045	\$15,000	\$0	\$15,000	\$15,000
	Total	\$313,343	\$319,780	\$0	\$319,780	\$319,780
71	ENTERPRISE FUND					
IT3002	IT-DATA PROCESSING	\$0	\$0	\$250,000	\$250,000	\$250,000
IT3008	IT CONTRACTUAL SVCS & REPAIRS	\$0	\$0	\$750,000	\$750,000	\$750,000
	Total	\$0	\$0	\$1,000,000	\$1,000,000	\$1,000,000
72	EDUCATIONAL TECHNOLOGY COUNCIL					

IT Capture Infrastructure Budget Details - Agency Budget Request

Page 5 of 68

00112 INFORMATION TECHNOLOGY

Date: 11/29/2004

2005B0100112

Time: 3:56:02PM

		Current Appropriation	Budget Request	Optional Adjustments	Request Plus Optionals	Subsequent Biennium
IT3003	IT TELEPHONE	\$2,000	\$2,000	\$0	\$2,000	\$2,000
IT3005	IT SOFTWARE/SUPPLIES	\$500	\$500	\$0	\$500	\$500
IT3008	IT CONTRACTUAL SVCS & REPAIRS	\$500	\$500	\$0	\$500	\$500
IT3038	IT EQUIPMENT UNDER \$5000	\$4,400	\$4,400	\$0	\$4,400	\$4,400
Total		\$7,400	\$7,400	\$0	\$7,400	\$7,400
74	WIDE AREA NETWORK					
SALARIES, WAGES & BENEFITS		\$232,436	\$225,266	\$0	\$225,266	\$227,000
IT3003	IT TELEPHONE	\$800	\$800	\$0	\$800	\$1,000
IT3005	IT SOFTWARE/SUPPLIES	\$20,000	\$20,000	\$0	\$20,000	\$20,000
IT3008	IT CONTRACTUAL SVCS & REPAIRS	\$6,726,757	\$6,744,878	\$75,079	\$6,819,957	\$6,800,000
IT3038	IT EQUIPMENT UNDER \$5000	\$25,000	\$25,000	\$0	\$25,000	\$25,000
TI5016	IT EQUIPMENT \$5000 & OVER	\$300,000	\$0	\$300,000	\$300,000	\$300,000
Total		\$7,304,993	\$7,015,944	\$375,079	\$7,391,023	\$7,373,000
75	ERP SYSTEM					
IT7090	SPECIAL LINE OTHER	\$20,000,000	\$0	\$0	\$0	\$0
Total		\$20,000,000	\$0	\$0	\$0	\$0
76	GEOGRAPHIC INFORMATION SYSTEM					
SALARIES, WAGES & BENEFITS		\$136,231	\$140,940	\$0	\$140,940	\$142,000
IT3002	IT-DATA PROCESSING	\$195,291	\$95,291	\$0	\$95,291	\$95,000
IT3003	IT TELEPHONE	\$1,000	\$1,000	\$0	\$1,000	\$1,000
IT3005	IT SOFTWARE/SUPPLIES	\$15,000	\$15,000	\$0	\$15,000	\$15,000
IT3008	IT CONTRACTUAL SVCS & REPAIRS	\$172,000	\$172,000	\$0	\$172,000	\$172,000
IT3038	IT EQUIPMENT UNDER \$5000	\$5,000	\$5,000	\$0	\$5,000	\$5,000
Total		\$524,522	\$429,231	\$0	\$429,231	\$430,000
Funding Source						
INDEPENDENT STUDY OPERATING FUND 11			\$207,978	\$0	\$207,978	\$207,978
ISD SERVICE FUND 112F			\$61,801,882	\$4,969,000	\$66,770,882	\$67,020,000
STATE GENERAL FUND			\$4,148,864	\$1,375,079	\$5,523,943	\$5,443,336

IT Capture Infrastructure Budget Details - Agency Budget Request

Page 6 of 68
Date: 11/29/2004
Time: 3:56:02PM

00112 INFORMATION TECHNOLOGY
2005B0100112

Current Appropriation	Budget Request	Optional Adjustments	Request Plus Optionals	Subsequent Biennium
	\$66,158,724	\$6,344,079	\$72,502,803	\$72,671,314

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: New Network

Priority - 1

New Initiative

Project Description

This project will replace the current statewide network with new technology and capacity to serve government and education through the year 2013.

Description of Business Need or Problem Driving the Project

The current network contract and extensions terminate in June 2006. A contract for a new network must be in place in time to begin a migration prior to that date. The expected life of a network without major upgrades is seven years. We therefore need to implement the capacity, performance, and technology that will serve government and education needs well into the next decade. It must enable applications that have not ever been dreamed of yet.

Description of how Project is Consistent with the Organization's Mission

ITD is required to provide wide area network services to all government and education entities in the state, including higher education.

Description of the Anticipated Benefits

Investment in new networking technology should bring huge dividends to the state. Savings from server consolidation, convergence of voice onto the network, better redundancy and disaster recovery capabilities, increased security, more flexibility and ability to isolate critical applications, more wireless access and the function and capacity to deploy new technology advancements, should be substantial.

Description of the Impact of NOT Implementing the Project

Because the network must be put out to bid, asking to continue with the existing services would almost surely cost the state more for no additional value. Also, remaining on the same technology would soon leave us with inadequate capacity to serve the growth in existing applications and incapable of providing for new or additional applications.

Identify any Risks Associated with the Project

The biggest risk is that the providers can not offer the technology required at an affordable cost.

Description of Additional Cost, if Any, for the Project

Additional Costs for the project that are not included in IT Object Codes

Additional Costs -

Optional Project Costs

Total Project Cost -

Total Project Cost + Optionals

Description of Non-Appropriated Funds -

n/a

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: New Network

	<u>CURRENT</u> <u>APPROPRIATIONS</u>	<u>BUDGET</u> <u>REQUEST</u>	<u>OPTIONAL</u> <u>ADJUSTMENT</u>	<u>REQUEST PLUS</u> <u>OPTIONALS</u>	<u>SUBSEQUENT</u> <u>BIENNIUM</u>
Total					
780 ISD SERVICE FUND 112F		\$0	\$0	\$0	\$0
Total Funding:		\$0	\$0	\$0	\$0

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: IP Telephony

Priority - 1

New Initiative

Project Description

This project will provide the base for a long term migration of the states telephone systems to a new IP based delivery system converged onto the states data and video network.

Description of Business Need or Problem Driving the Project

Most of the states telephone systems are 10-15 years old. Voice over IP technology has been accepted by the industry and all major telephone carriers are migrating their systems to VoIP technology. VoIP has the potential to provide the state significant savings through convergence with the new data and video network. VoIP also allows for centralized support and flexibility in what a phone can do.

Description of how Project is Consistent with the Organization's Mission

ITD is required by law to provide telephone services to all state agencies.

Description of the Anticipated Benefits

Reduced support costs and reduction in telco charges should give the state substantial savings.

Description of the Impact of NOT Implementing the Project

Our aging equipment will become more costly to maintain. We will not be able to provide the functionality required by new agency applications and will not be taking advantage of money saving opportunities. The only winner will be the phone companies.

Identify any Risks Associated with the Project

The new technology may not be as stable or sound as people are used to - causing strong resistance to change.

Description of Additional Cost, if Any, for the Project

Additional Costs for the project that are not included in IT Object Codes

Additional Costs -

Optional Project Costs

Total Project Cost -

Total Project Cost + Optionals

Description of Non-Appropriated Funds -

n/a

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: IP Telephony

	<u>CURRENT</u> <u>APPROPRIATIONS</u>	<u>BUDGET</u> <u>REQUEST</u>	<u>OPTIONAL</u> <u>ADJUSTMENT</u>	<u>REQUEST PLUS</u> <u>OPTIONALS</u>	<u>SUBSEQUENT</u> <u>BIENNIUM</u>
Total					
780 ISD SERVICE FUND 112F		\$0	\$0	\$0	\$0
Total Funding:		\$0	\$0	\$0	\$0

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: CJIS - Establish services to support deployment

Priority - 100

Ongoing Initiative

Project Description

The purpose of the CJIS Project is to integrate information sharing between criminal justice agencies and other state agencies that have a need to access shared information.

The concept of integrated justice information sharing refers to the ability to “share critical information at key decision points throughout the justice enterprise”. It should be noted that integration also includes the sharing of information with traditionally non-justice agencies (eg: Game and Fish, Health and Human Services organizations, Department of Transportation, etc.), and with the public, which increasingly is demanding greater and more varied access to an expanding array of government information and services. Moreover, this information sharing and access extends across agencies and branches of government at the local level (horizontal integration), to include users/customers in local, state and federal jurisdictions (vertical integration).

Description of Business Need or Problem Driving the Project

In North Dakota, as in many other states, the effective operation of the juvenile and adult justice system is a critical factor in ensuring and improving public safety.

State and local jurisdictions across the nation invest a significant portion of their overall budget in the staff, facilities, equipment, and information technology (IT) needed to deliver justice services to the public. As is typical in many jurisdictions, the IT systems that help manage and plan criminal justice operations are often functionally limited and lack the ability to electronically share information among justice stakeholders and their systems. Nationwide, increasing attention is being given to investing prudently in IT as a key enabler for implementing change and improving information sharing across the justice enterprise.

The North Dakota criminal justice community has recognized this opportunity and has developed a Strategic Plan to facilitate justice information sharing.

Description of how Project is Consistent with the Organization's Mission

Goal 1 - Ensure Effective Operations. Criminal justice operations will be characterized by highly efficient and effective programs and processes.

Description of the Anticipated Benefits

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: CJIS - Establish services to support deployment

- ¿ More accurate and complete data available in a more timely fashion.
- ¿ Reduction of redundant data entry, which leads to greater efficiency and accuracy.
- ¿ Significant reduction of paper documents.
- ¿ Better decisionmaking by criminal justice officers and management in allocating resources.
- ¿ More complete, accurate, timely and accessible information will improve reporting and trend analysis, streamline data processing and workflow, and will ultimately enhance public and officer safety.

Description of the Impact of NOT Implementing the Project

Needed tools to increase officer and public safety will be delayed. The criminal justice system will not have the capability to easily share information or view case status. Lack of timely information may put officers and the public at risk.

Identify any Risks Associated with the Project

- ¿ Will there be sufficient funds throughout program implementation.
- ¿ Will agencies assign required dedicated resources to support CJIS projects.
- ¿ Will there be sufficient user participation to define requirements and business processes.
- ¿ Will there be general funds allocated to maintain the system.
- ¿ Will individual agencies have the funds to pay user fees for applications.

Description of Additional Cost, if Any, for the Project

Additional Costs for the project that are not included in IT Object Codes

Additional Costs -

Optional Project Costs

Total Project Cost -

Total Project Cost + Optionals

Description of Non-Appropriated Funds -

n/a

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: CJIS - Establish services to support deployment

	<u>CURRENT</u> <u>APPROPRIATIONS</u>	<u>BUDGET</u> <u>REQUEST</u>	<u>OPTIONAL</u> <u>ADJUSTMENT</u>	<u>REQUEST PLUS</u> <u>OPTIONALS</u>	<u>SUBSEQUENT</u> <u>BIENNIUM</u>
IT3002 IT-DATA PROCESSING	\$4,241,200	\$1,000,000	\$1,400,000	\$2,400,000	\$1,900,000
IT3005 IT SOFTWARE/SUPPLIES	\$500,000	\$500,000	\$0	\$500,000	\$500,000
IT3008 IT CONTRACTUAL SVCS & REPAIRS	\$0	\$0	\$100,000	\$100,000	\$100,000
Total	\$4,741,200	\$1,500,000	\$1,500,000	\$3,000,000	\$2,500,000
001 STATE GENERAL FUND		\$0	\$1,000,000	\$1,000,000	\$1,000,000
780 ISD SERVICE FUND 112F		\$1,500,000	\$0	\$1,500,000	\$1,500,000
G149 CJIS GRANT		\$0	\$500,000	\$500,000	\$0
Total Funding:		\$1,500,000	\$1,500,000	\$3,000,000	\$2,500,000

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: Second Data Center

Priority - 100

New Initiative

Project Description

This project includes the planning for and creation of a Second Data Center for ITD.

Description of Business Need or Problem Driving the Project

ITD requires a second data center in order to meet the availability requirements of its customers should an outage render the Judicial Wing computer room unusable. In a disaster situation, ITD is currently unable to restore its platforms in the time frame required by its customers.

Description of how Project is Consistent with the Organization's Mission

ITD is required by law to provide information technology services that meet the requirements of its customers. A primary requirement is the availability and recoverability of critical systems. This project enables ITD to meet those requirements.

Description of the Anticipated Benefits

Having a second data center will reduce systems restoration time to acceptable levels and thereby meet the availability and recoverability requirements of ITD's customers.

Description of the Impact of NOT Implementing the Project

In a disaster situation ITD would not be able to recover agency applications in the timeframe required.

Identify any Risks Associated with the Project

(specified in narrative attachment...)

- 1) High cost could negate the feasibility of the project. Mitigation: As costs become known, alternatives to the original plan should be explored.
- 2) The high number of questions / variables in the project cause the project deliverables and schedule to slip. Mitigation: As questions are reviewed and answered, the information produced should be communicated and the project scope, schedule, and costs aligned where necessary.
- 3) The distance between servers could slow down response time. Mitigation: As testing of the connection develops, increases in bandwidth must be explored.
- 4) The completion of construction could be delayed. Mitigation: ITD will work with DCN to determine whether slippage is occurring and what can be done about it.
- 5) The 2005 legislative session could delay platform moves. Mitigation: If available on December 1, 2004, platforms affecting the legislative session will be given priority for movement.

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: Second Data Center

Description of Additional Cost, if Any, for the Project

Additional Costs for the project that are not included in IT Object Codes

Additional Costs -

Optional Project Costs

Total Project Cost -**Total Project Cost + Optionals**

Description of Non-Appropriated Funds -

n/a

	<u>CURRENT</u> <u>APPROPRIATIONS</u>	<u>BUDGET</u> <u>REQUEST</u>	<u>OPTIONAL</u> <u>ADJUSTMENT</u>	<u>REQUEST PLUS</u> <u>OPTIONALS</u>	<u>SUBSEQUENT</u> <u>BIENNIUM</u>
Total					
780 ISD SERVICE FUND 112F		\$0	\$0	\$0	\$0
Total Funding:		\$0	\$0	\$0	\$0

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: Mainframe Migration Strategy

Priority - 100

New Initiative

Project Description

The State is currently hosting applications on an IBM z800, 350 MIPS mainframe environment. This project will evaluate migrating from the current mainframe application environment to some other platform. Note that this does not mean re-writing applications; rather applications will be migrated, or ported, to the new environment.

Description of Business Need or Problem Driving the Project

The current mainframe environment provides applications that serve essential business functions for many state agencies, including Tax Dept., DHS, BND, the Legislature and DOT. It is appropriate to evaluate migrating from this mainframe environment for several reasons: (continued...)

1) The industry is moving to a distributed computing model with Intel based servers providing the computing horse power. Use of this platform could provide the state ongoing savings in hardware/software licensing and maintenance costs.

2) Obtaining staff with the skills needed to support the mainframe environment is becoming more and more difficult: some 60% of the people with mainframe skills are age 50 or older.

Description of how Project is Consistent with the Organization's Mission

The mainframe is a critical component in fulfilling ITD's mission; providing information technology services to state government.

Description of the Anticipated Benefits

There are potentially significant cost savings in hardware/software licensing and maintenance. In addition, hiring and retaining staff with the needed skill sets will be made easier by a migration from the mainframe.

Description of the Impact of NOT Implementing the Project

Continued support of the mainframe would require that ITD institute an internal training program to provide staff with the needed skill sets. These newly trained staff will have a skill set that is in high demand and so retaining them may be problematic. In addition to support staff issues, the potential exists where supporting the platform could become more costly and, to recover costs, place a burden on agencies with remaining applications.

Identify any Risks Associated with the Project

The mainframe is the gold standard for reliable transaction processing. While other platforms (Windows, Linux, Solaris, AIX) can support the workload there could be some degradation of reliability. To minimize this risk the new systems will be architected with a high-degree of availability and reliability.

Description of Additional Cost, if Any, for the Project

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: Mainframe Migration Strategy

Additional Costs for the project that are not included in IT Object Codes

Additional Costs -

Optional Project Costs

Total Project Cost -**Total Project Cost + Optionals****Description of Non-Appropriated Funds -**

n/a

	<u>CURRENT</u>	<u>BUDGET</u>	<u>OPTIONAL</u>	<u>REQUEST PLUS</u>	<u>SUBSEQUENT</u>
	<u>APPROPRIATIONS</u>	<u>REQUEST</u>	<u>ADJUSTMENT</u>	<u>OPTIONALS</u>	<u>BIENNIUM</u>
IT3005 IT SOFTWARE/SUPPLIES	\$0	\$1,300,000	\$0	\$1,300,000	\$1,300,000
IT3008 IT CONTRACTUAL SVCS & REPAIRS	\$0	\$4,700,000	\$0	\$4,700,000	\$4,700,000
Total	\$0	\$6,000,000	\$0	\$6,000,000	\$6,000,000
780 ISD SERVICE FUND 112F		\$6,000,000	\$0	\$6,000,000	\$6,000,000
Total Funding:		\$6,000,000	\$0	\$6,000,000	\$6,000,000

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: GIS - Support operations & expansion

Priority - 100 Ongoing Initiative

Project Description

This project consists of the expanded development in functionality and content provided within the GIS data repository, known as the "GIS Hub", which is utilized by state agencies and other government and business organizations. (continued...)

The GIS Hub provides a centralized database of geospatial data and provides the web-based framework used to host agency-specific and enterprise-level applications. The charter statement of the project is: "The State of North Dakota's GIS Hub will provide the essential infrastructure to share core geographic datasets through an accessible data warehouse among Stakeholders with browsing ability to the general public. The Hub leverages the state's existing data, infrastructure and expertise to implement the core elements of this enterprise solution."

This project develops additional hub data in the areas of Digital Elevation Models (DEM's), aerial photography, and National Hydrological Dataset (NHD).

Description of Business Need or Problem Driving the Project

Maintain the user base that is supporting GIS initiatives and data. Expand on the user base that will donate and maintain GIS data on the Hub. Specifically, (continued...)

- Need improved access to GIS data from other agencies
- Need to provide access to GIS data for more users
- Need to Improve the distribution of data between agencies
- Need to Improve the distribution of information to the public
- Need to acquire data from other agencies in a more timely fashion
- Need to Reduce and avoid the cost of data storage
- Need to Reduce the costs of data maintenance
- Need to Reduce the cost per user for GIS
- Need to develop security model for sensitive GIS data
- Need tools to find and assess datasets
- Need to provide a common framework to host spatially-enabled web applications
- Need to Improve GIS data consistency

Description of how Project is Consistent with the Organization's Mission

GIS continues to be a technology that is utilized by many disciplines inside and outside of state government. Thus, the GIS Hub plays an integral part of helping state agencies accomplish their work, a key portion of ITD's mission statement.

Description of the Anticipated Benefits

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: GIS - Support operations & expansion

Anyone in the world can download and use data from the GIS Hub. They get their information from the GIS Hub web page. Other stakeholders are the GIS community in state and local govt. The GIS technical Committee meets monthly and the entire GIS community has an annual meeting. All meeting notes are maintained on the GIS website. Specifically, (continued...)

- Centralized storage - "one stop shopping"
- Reduce costs - agencies not forced to develop their own infrastructure.
- Supplies core component for disaster planning, safety, and health.
- Enhances economic development - oil & gas, mining, attracting new business
- Increase access to GIS data - free tools.
- Greater re-use of data - different & new uses.
- Improve distribution of information to public.

Description of the Impact of NOT Implementing the Project

Duplicated infrastructure, duplicated data, lack of common interface to the state's geospatial data, lack of a single infrastructure that can be used by agencies to quickly roll out an application, little to no public access to state geospatial data.

Identify any Risks Associated with the Project

The GIS Hub has already been implemented and is being used by state and local government, along with the public and private enterprise. The primary risk to the GIS Hub is the loss of legislative funding. A secondary risk is stagnation brought on by funding sufficient only for maintenance with no provision for development.

(continued...)

The consolidation project mandated by the legislature is impacting the GIS Hub to some degree and may continue to do so, though the level of impact is difficult to accurately measure. The greatest impact brought on by consolidation is that by nature GIS tends to work well in a distributed environment where GIS data used in an application can be sourced from the Hub and agency servers. With servers and storage being moved in to ITD, some agencies will be restricted in the kind and amount of data that they will be able to generate, to be used by the Hub. As storage costs at ITD are reduced, this problem should be mitigated somewhat.

Description of Additional Cost, if Any, for the Project

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: GIS - Support operations & expansion

Additional Costs for the project that are not included in IT Object Codes

Additional Costs -

Optional Project Costs

Total Project Cost -**Total Project Cost + Optionals****Description of Non-Appropriated Funds -**

n/a

	<u>CURRENT</u>	<u>BUDGET</u>	<u>OPTIONAL</u>	<u>REQUEST PLUS</u>	<u>SUBSEQUENT</u>
	<u>APPROPRIATIONS</u>	<u>REQUEST</u>	<u>ADJUSTMENT</u>	<u>OPTIONALS</u>	<u>BIENNIUM</u>
IT3002 IT-DATA PROCESSING	\$0	\$0	\$100,000	\$100,000	\$100,000
IT3008 IT CONTRACTUAL SVCS & REPAIRS	\$0	\$0	\$325,000	\$325,000	\$0
Total	\$0	\$0	\$425,000	\$425,000	\$100,000
001 STATE GENERAL FUND		\$0	\$425,000	\$425,000	\$100,000
Total Funding:		\$0	\$425,000	\$425,000	\$100,000

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: Enhanced Support Center

Priority - 100

New Initiative

Project Description

This is a set of projects that support a longer-termed initiative to improve our help desk capabilities. It is our goal to achieve a Help Desk Institute Support Center Certification indicating a "Best in Class" achievement within the next three biennium.

These projects will include implementing a problem resolution tool (knowledge base), redesigning the current call tracking tool to take advantage of resolution tool and other support model changes to be made. This initiative also includes a project to develop and maintain a training program for the support staff, implement an asset management and remote support tool, and a enterprise classed system diagnostic tool. Not all of these projects may occur in the next biennium, but the initiative includes budget estimates for future biennium.

Description of Business Need or Problem Driving the Project

The current support model ITD is using has limitations on expansion and flexibility. It is a reactive environment only. We need to create a model that incorporates the features of a standard break/fix help desk but addresses the broader issue of managing service & support requests to improve operational efficiency and quality of service.

The projects in this initiative will allow us to better accommodate the changing IT environment that we find ourselves supporting. As projects such as ConnectND and CJIS continue to expand, they will require a more flexible support model than is currently in place. Due to functional consolidation of servers, many agencies no longer have an end-to-end view of their application. ITD needs to provide that view and needs to implement tools that allow us to be more proactive in our support.

Description of how Project is Consistent with the Organization's Mission

ITD's mission is to provide leadership and knowledge to assist our customers in achieving their mission through the innovative use of information technology. This project is consistent with that statement. The initiative focuses on improving the manner in which ITD supports the agencies and looks at possible ways to provide additional support services.

Description of the Anticipated Benefits

While project will have specific objectives and benefits to achieve a general summary is as follows.

Significant improvement in application performance and availability should be attained. The new model should be geared to analyze problems and changes for the purpose of building a more predictive service and support delivery organization.

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: Enhanced Support Center

Application testing can be more thorough resulting in more stable applications and saving time for both state employees and citizens needing government services.

An improved change management process would provide the service desk and customers a better picture of planned outages and updates that could impact the ability to provide their services.

Actively track IT asset locations, configurations, and deployed versions. This gives the support agent the ability to identify key components to speed problem troubleshooting and resolution. It also allows (with an interface to PeopleSoft) the ability to have a updated database across state government and (with a PeopleSoft interface to the Continuity Of Government system) updated disaster recovery information.

Allow agencies to actively track hardware and software usages providing the ability to identify underutilized assets or unused software licenses.

Reduce training time for support technicians. By having the knowledge at their fingertips, they will be able to resolve more calls without escalation or needing to have someone sit beside them.

Shorten call times or increase the complexity of calls being handled at first contact. As an integrated solution with the problem tracking system, the knowledge base can feed support agents resolution details and complete tickets automatically. This will allow agents to become available in a timelier manner and able to handle more calls per day. Or by providing additional, in-depth documentation agents would be able to handle more complex calls.

Decrease escalation rates. By having documented step-by-step instructions available to the Tier 1 agents, fewer calls will require escalation.

Improve response consistency. A knowledge base will ensure you receive the same issue resolution from all agents increasing customer confidence.

Description of the Impact of NOT Implementing the Project

Aside from not receiving the benefits noted above, there are several risks that may occur should the initiative not be funded.

One key risk is that ITD may struggle to provide a satisfactory response time for agency application issues. This could cause distrust and play a role in discrediting the consolidation effort.

Identify any Risks Associated with the Project

The greatest risk is not being able to appropriately staff the support center and provide the necessary training.

Description of Additional Cost, if Any, for the Project

IT Capture Project Details - Agency Budget Request

Date: 11/30/2004

Time 7:40:42AM

00112 INFORMATION TECHNOLOGY

Version 2005B0100112

Project: Enhanced Support Center

Additional Costs for the project that are not included in IT Object Codes

Additional Costs -

Optional Project Costs

Total Project Cost -**Total Project Cost + Optionals****Description of Non-Appropriated Funds -**

n/a

		<u>CURRENT</u> <u>APPROPRIATIONS</u>	<u>BUDGET</u> <u>REQUEST</u>	<u>OPTIONAL</u> <u>ADJUSTMENT</u>	<u>REQUEST PLUS</u> <u>OPTIONALS</u>	<u>SUBSEQUENT</u> <u>BIENNIUM</u>
IT3005	IT SOFTWARE/SUPPLIES	\$0	\$0	\$578,000	\$578,000	\$100,000
IT3008	IT CONTRACTUAL SVCS & REPAIRS	\$0	\$0	\$164,800	\$164,800	\$100,000
Total		\$0	\$0	\$742,800	\$742,800	\$200,000
001	STATE GENERAL FUND		\$0	\$742,800	\$742,800	\$200,000
Total Funding:			\$0	\$742,800	\$742,800	\$200,000